

REMARKS

The Examiner is thanked for the thorough consideration given the present application.

Claims 1-3 and 6-17 are currently being prosecuted, and claims 1, 13, 14 and 17 are independent. Claim 1 has been amended to include the subject matter of claims 4 and 5, and thus claims 4 and 5 have been cancelled. Also, claims 14 and 17 have been amended to address minor informalities. Further, claims 18-20 have been cancelled. Therefore, no new matter has been added by the present amendment.

Reconsideration of this application, as amended, is respectfully requested.

Priority under 35 U.S.C. § 119

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. §119, and receipt of the certified priority document.

Information Disclosure Citation

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statements filed January 13, 2006, August 6, 2007 and March 7, 2008 and for providing Applicants with initialed copies of the PTO/SB/08 forms filed therewith.

Claim Rejections under 35 USC § 103 (a)

Claims 1-3, 5 and 7-12 are rejected under 35 USC § 103 (a) as being unpatentable over Maeda et al., in view of Levinson et al. Also, claims 4, 13, 14 and 27 are rejected under 35 USC § 103 (a) as being unpatentable over Maeda in view of Levinson and further in view of Park et

al. Further, claims 6 and 18 are rejected under 35 USC § 103 (a) as being unpatentable over Maeda in view of Levinson and further in view of Hase et al. Furthermore, claims 15 and 16 are rejected under 35 USC § 103 (a) as being unpatentable over Levinson and Park and further in view of Hase. Lastly, claims 19 and 20 are rejected under 35 USC § 103 (a) as being unpatentable over Maeda in view of Levinson and Hase, and further in view of Hohn et al. Applicants respectfully traverse these rejections.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

While not conceding to the Examiner, to merely advance prosecution, claim 1 has been amended to further emphasize the distinctions between the present invention and the cited art. Also, claims 18-20 have been cancelled. By way of this amendment, the 103 rejections are rendered moot for at least the following reasons:

Claim 1 is directed to a light emitting chip; and a phosphor through which a first light emitting from the light emitting chip passes, wherein the phosphor comprises a silicate phosphor exciting a second light having a first centered emission peak using the first light and a sulfide phosphor exciting a third light having a second centered emission peak using the first light, and wherein the silicate phosphor has a chemical formula of $\text{Sr}_{3-x}\text{SiO}_5:\text{Eu}^{2+}_x$ ($0 < x \leq 1$), and wherein the sulfide phosphor has a chemical formula of $\text{Sr}_{1-x}\text{Ga}_2\text{S}_4:\text{Eu}^{2+}_x$ ($0.001 \leq x \leq 1$). Other independent claims 13, 14 and 17 have similar features.

However, the cited references including Maeda, Levinson, Park, Hase and Hohn fail to teach or suggest the claimed features that a silicate phosphor has a chemical formula of Sr_3 .

$x\text{SiO}_5:\text{Eu}^{2+}_x$ ($0 < x \leq 1$) and a sulfide phosphor has a chemical formula of $\text{Sr}_{1-x}\text{Ga}_2\text{S}_4:\text{Eu}^{2+}_x$ ($0.001 \leq x \leq 1$).

Specifically, Maeda remains silent about the chemical compositions of the silicate phosphor and the sulfide phosphor.

Also, Levinson merely teaches a phosphor having a chemical formula of $\text{SrGa}_2\text{S}_4:\text{Eu}^{2+}$ (see, abstract of Levinson) and Park merely teaches a phosphor having a chemical formula of $\text{Sr}_3\text{SiO}_5:\text{Eu}^{2+}$ (see introduction of Park). Even though these cited references are combined, they cannot reach the claimed features. In particular, since the sulfide phosphor of the claimed invention has a range of $0.001 \leq x \leq 1$, Sr_{1-x} portion of the claimed invention cannot be the Sr_1 of Levinson. Also, since the silicate phosphor of the claimed invention has a range of $0 < x \leq 1$, Sr_3 portion of the claimed invention cannot be the Sr_3 of Park. Further, Hase and Hohn fail to disclose or suggest the claimed features.

As the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of obviousness. See MPEP § 2143.03. In view of the fact that the cited references fail to teach or fairly suggest that a silicate phosphor has a chemical formula of $\text{Sr}_{3-x}\text{SiO}_5:\text{Eu}^{2+}_x$ ($0 < x \leq 1$) and a sulfide phosphor has a chemical formula of $\text{Sr}_{1-x}\text{Ga}_2\text{S}_4:\text{Eu}^{2+}_x$ ($0.001 \leq x \leq 1$), a *prima facie* case of obviousness cannot be said to exist.

Therefore, the chemical formula of the phosphor of the claimed invention is patentably distinct from the phosphors of the cited references and the claimed invention is not made obvious over the cited art, singly or in combination. Accordingly, all pending claims are believed to be allowable. Reconsideration and withdrawal of the relevant rejections are therefore respectfully requested.

CONCLUSION

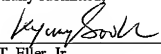
All of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Therefore, reconsideration and withdrawal all presently outstanding rejections are respectfully requested and deemed proper. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kyung Sook Chang, Reg. No. 56,946 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

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